of cases, a smoking in 35.83% of cases, 17.25% of obesity cases, hypercholesterolemia in 45% of cases.

The coronarography was performed in 69% of cases for acute coronary syndrome, assessment of stable angina in 32% of cases. Two-vessel coronary artery disease was noted in 20% of patients and Three-vessel disease represented 35% of cases.

Drug-eluting stents were used in 60% of cases, 10% of coronary artery bypass graft. We noted six deaths, including 2 postoperative.

Conclusion: Coronary artery disease is not only more frequent in diabetics; it is also more severe because of the spread and complexity of coronary lesions, with higher rates of thrombosis and restenosis of stents.

051

Prevalence of metabolic syndrome in patients with acute myocardial infarction (about 409 patients)

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Background: The prevalence of metabolic syndrome is correlated with the extent of damage in symptomatic cardiovascular disease

The aim of our study was to evaluate the impact of metabolic syndrome on morbidity and in-hospital mortality, particularly in terms of death and severe heart failure, and analyze the relative importance of different components that define the metabolic syndrome on the occurrence of these events.

Methods and results: The study included 409 patients admitted for myocardial infarction. The average age of our patients was 64, 42, with a male predominance. Fifty percent patients were hypertensive, 46% had type 2 diabetes, twenty percent of patients had hypertriglyceridemia and 45% a hypoHDLemia. Thirty percent patients have a positive microalbuminuria, 60% have a chronic smoking. The prevalence of metabolic syndrome was 45% defined by the combination of at least three risk factors from the definition of the IDF (International Diabetes Federation) on 2005. Nineteen percent patients had a history of myocardial infarction and 47% had heart failure. The death during hospitalization were 10%. The history of stroke were present in 10% of cases.

Conclusion: The patient who have a metabolic syndrome are at high cardiovascular risk and represent a strong signal that must be detected, managed and fight against all the factors that compose it.

052

Left ventricular aneurysm after myocardial infarction

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Introduction: Left ventricular aneurysm (LVA) constitutes an important complication of acute transmural myocardial infarction (MI). Angiographically defined, LVA has been reported in 7.6% of patients with coronary artery disease (CAD) referred for coronary angiography. It is well established that patients with LVA are exposed to a higher incidence of complications such as arrhythmias, thromboembolic phenomena, and congestive heart failure.

Case report: We report the case of a 76-year-old woman, hypertensive, diabetic, with a history of percutaneous coronary angioplasty with stenting of the distal and mid segments of left anterior descending artery (LAD) for myocardial infarction 10 months ago, admitted to our cardiology department for acute coronary syndrome without ST-segment elevation complicated by left ventricular failure. The electrocardiogram showed sinus rhythm at 100 beats per minute with abnormal Q waves (sequelae of necrosis) in the inferior leads. Transthoracic and transesophageal echocardiography revealed an aneurysm of the infero-basal left ventricular wall, having implantation base in the small mitral valve, measuring 44 mm x 44 mm and filled by a thrombus. The LV was dilated and hypertrophied with a reduced ejection fraction (EF) of 40%. There was a severe ischemic mitral regurgitation (MR). MRI confirmed the ultrasound findings. The coronary angiography objective diffuse coronary restenosis in the stent of the LAD and an occlusion of the distal right coronary artery, not supplied by the left coronary arteries. The indication for surgery was taken. The patient underwent a coronary artery bypass grafting of LAD, a mitral valve repair by Carpentier ring and a resection of the ventricular aneurysm. Her postoperative course was uneventful. The postoperative echocardiographic control showed an improvement of LVEF to 50%, a minimal MR.

Conclusion: The left ventricular aneurysm, late mechanical complication of myocardial infarction, presents a management problem. Surgical treatment is usually effective and followed by a marked improvement in function but is burdened with a heavy postoperative mortality.

053

Evolution of antiplatelet therapy compliance during the first year after percutaneous coronary intervention: a 100 patients monocentric cohort.

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Aims: Non compliance to dual antiplatelet therapy (DAT) after PCI is associated to a higher cardiovascular mortality. Previous studies about DAT discontinuation only analysed non compliance during short periods, generally less than three months. The purpose of this monocentric prospective study was to analyse DAT discontinuation during a one year follow-up in real-life patients after PCI.

Method and results: We prospectively included 103 consecutive patients who underwent PCI. They underwent a phone questionnaire focusing on DAT compliance every three months on a one year follow-up. Three groups of patients were defined according to compliance WHO (World Health Organization) definition: DAT oversight more than once a week, self-willed DAT discontinuation and good adherers. A total of 100 patients had complete data. Global non compliance to DAT (oversight and discontinuation) was about 33% at twelve months. Twenty seven percent patients forgot DAT more than once a week at one year. More than 50% of DAT oversight occurred within the first month. Self-willed DAT discontinuation occurred in 13% cases, with a progressive increase on the first 12 months, mainly explained by weariness or treatment side effects.

Conclusion: Global DAT non compliance at one year was about 33% cases. There were two profiles of DAT non compliance: oversight, occurring almost within the first month and self-willed DAT discontinuation which progressively increased during the first year. Therapeutic education seems to be pivotal to prevent both behaviours.

054

Additive prognostic value of elevated left ventricular filling pressure during non ST elevation acute coronary syndrome

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Myocardial ischemia during acute coronary syndromes (ACS) without ST segment elevation is responsible for diastolic dysfunction. The aim of our study is to evaluate LVFP in patients suffering from an ACS without ST segment elevation and to appreciate the additive prognostic value of this parameter beside the Global Registry of Acute Coronary Events (GRACE) score and the left ventricular ejection fraction (LVEF). This strategy may lead to a better risk stratification in this population.

Methods: We performed a prospective study in 220 patients admitted to our coronary care unit for ACS without ST segment elevation from January 2007 to September 2008. Risk score stratification using the GRACE score and assessment of systolic and diastolic functions by echocardiography was performed in all patients. LVFP was estimated by the E/e' ratio and the difference between Ap and Am.

Results: The mean age was 58 years with a sex ratio of 4.3. Hypertension, diabetes and dyslipidemia were present in 45%, 45% and 32.2% of cases respec-

tively. The mean body-mass index was 26.1 kg/m².In-hospital mortality was 1.84%. After 2-years follow up, the survival rate was 92.16% with an event-free survival rate of 71.9%. In our population, elevated LVFP was found in 32.3% of cases mainly in elderly (p=0.007), diabetic (p=0.041), patients with hypertension (p<0.001), with a history of myocardial infarction (p<0.001) and in Killip 3 or 4 class (p<0.001). Chronic kidney disease and anemia were also found predictive of elevated LVFP (p values of 0.007 and 0.016 respectively). An intermediate or high GRACE score and LVEF< 45% are predictive of poor prognosis. The additive prognostic value of LVFP was calculated and confirmed in our study. In fact E/e' ratio>15 improve the prognostic value of the combination of the GRACE score and LVEF with a chi² value of 54.74.

Conclusion: Our study confirms the additive prognostic value of LVFP in addition to the GRACE risk score and LVEF in patients admitted for ACS without ST segment elevation.

055

Improved screening for silent AF during the acute phase of myocardial infarction

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Background: Although silent Atrial Fibrillation (AF) has been suggested to be common in Acute myocardial infarction (AMI), the true incidence and characteristics of silent AF in AMI remains unknown. We aim to assess silent AF incidence and determinants, including left atrium parameters.

Methods and results: 581 consecutive AMI were prospectively analyzed by Continuous ECG Scope Monitoring (CSM) for 48H after hospital admission. New onset AF was defined as at least 1 episode >30 sec, absence of p waves, and irregular RR intervals on CSM or absence of p waves or irregular RR intervals on 12-lead ECG, without any duration criterion. Left Atrial (LA) dimensions and Left Ventricular Ejection Fraction (LVEF) were determined on admission by echocardiography. We analyzed the study population into 3 groups: No AF, silent AF (defined as asymptomatic episodes of AF lasting at least >30 sec) and symptomatic AF (defined as symptomatic episodes of AF that lasted ≥12hours). Ninety-five (16.4%) patients had AF on CSM, of whom 76 (80%) developed silent AF. Compared with No AF group, patients with silent AF were older (80 vs 62 y; p<0.001), more frequently women (45 vs 27%; p=0.006), hypertensive (76% vs 52%; p<0.001) but less smoker (18% vs 38%; p<0.001). Moreover, they had significant LA enlargement based on indexed LA diameter (24.4 vs 20.3 mm/m²; p<0.001), and indexed left atrial volume (LAVI) (36.12 vs 26.95 ml/ m²; p=0.002). They also had impaired LVEF (46 vs 54%; p<0.001). By multivariate analysis, age (OR (95%CI): 1.06 (1.03-1.09), CRP (OR (95%CI): 1.01(1.00-1.02) and indexed LA diameter (OR (95%CI): 2.37 (1.31-4.25) were predictors of silent AF. By ROC curve analysis, LAVI at 26.88 ml/m² was the best cutoff value to predict silent AF occurrence after AMI, with sensibility at 73% and specificity at 50%.

Conclusion: In this prospective study in routine clinical practice, silent AF in AMI is very common and is mostly underdiagnosed by classical discontinued serial ECG monitoring. Left atrial parameters assessed by echocardiography, including indexed diameter and LAVI, should be evaluated on admission to predict silent AF occurrence.

056

Biological efficacy of a 600 mg loading dose of clopidogrel in ST-elevation myocardial infarction

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Background: Optimal platelet reactivity (PR) inhibition is critical to prevent thrombotic events in primary percutaneous coronary intervention (PCI). We aimed to determine the relationship between high on-treatment platelet reactivity (HTPR) and ST-elevation myocardial infarction (STEMI) following a 600mg loading dose (LD) of clopidogrel.

Methods and results: We performed a prospective monocentre study enrolling patients on clopidogrel undergoing PCI. The VASP index was used to assess PR inhibition after clopidogrel LD. HTPR was defined according to the consensus as a VASP index ≥50%. The present study included 833 patients undergoing PCI. Most patients had PCI for an acute coronary syndrome (58.7%). The mean VASP index was 50 ±23% with a large inter-individual variability (range: 1-94%). Patients with a VASP index ≥50% were significantly older (p= 0.03), with a higher BMI (p<0.001), more often diabetic (p=0.03), taking omeprazole (p=0.03), admitted for an ACS and with a high fibrinogen level compared to good responders (VASP<50%). In multivariate analysis BMI, omeprazole use, acute coronary syndrome and high fibrinogen level (p<0.001) remained significantly associated with HTPR. Of importance, in this analysis STEMI was independently associated with HTPR when compared with the other forms of ACS (NSTEMI and unstable angina) with an odd ratio of 2.14 (95% CI: 1.3 –3.5; p=0.003).

Conclusion: STEMI is associated with high on-treatment platelet reactivity following 600 mg of clopidogrel. The present results suggest that 600 mg of clopidogrel may not be able to achieve an optimal PR inhibition in STEMI patients undergoing PCI and more potent drugs may be preferred.

057

Short term benefit of early statins prescription in STEMI patients

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Objective: Benefits of statins in the long term follow-up of ST elevation myocardial infarction (STEMI) have been established, but the short term benefits of early statins prescription remain unproven, especially according to the reperfusion result.

Aim of the study: to assess the benefit of early statins prescription in in-hospital outcome of STEMI patients.

Methods: Between January 1995 and November 2011, 1388 patients admitted for STEMI have been included in the MIRAMI (MonastIR Acute Myocardial Infarction) registry. During this period, statins were introduced in early management of STEMI patients. This enabled us subdivide patients, after excluding those with missing treatment data, into 2 groups: early prescribed statins group (n= 561) versus no statins prescribed group (n=804). We compared in-hospital outcome between these two groups and among the subgroups of successful or failure reperfusion therapy.

Results: In the early statins prescription group, there was a significant reduction of in-hospital mortality (12.1% vs 5.3%, p<0.001), ventricular arrhythmias (5.3% vs 2.2%, p<0.001 for ventricular tachycardia, 5.6% vs 3.1%, p=0.03 for ventricular fibrillation), and atrial fibrillation (7.7% vs 5%, p=0.049). When successful reperfusion (whatever the method is), mortality was lower in the early statins prescription group (6.8% vs 1.8%, p=0.001). This difference is less pronounced when reperfusion fails (16.1% vs 11%, p=0.07).

Conclusion: Early statins prescription improves in-hospital outcome (mortality, ventricular and supra-ventricular arrhythmias). This improvement is much marked when reperfusion is successful with only a trend to beneficial effect in case of reperfusion failure.